

IN THE CLAIMS

1. (Currently Amended) A ceramic heater to be used in the semiconductor industry for heating a wafer, comprising:

a disc-form ceramic substrate having a heating surface configured to heat said wafer, and comprising a nitride ceramic or a carbide ceramic;

a resistance heating element comprising at least one circuit, said resistance heating element being arranged on an outermost surface of said ceramic substrate; and

an insulating covering deposited on the resistance heating element,

wherein said resistance heating element is positioned on an opposite side of said heating surface;

said insulating covering does not inhibit heat flow to said wafer; and

said insulating covering comprises oxide glass including at least one of Pb and B.

2. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 1,

wherein said insulating covering is deposited in a stretch containing a portion where said circuit is formed.

3-5. (Canceled)

6. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 1, wherein said insulating covering covers the resistance heating element comprising two or more circuits in a lump.

7. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 1, wherein said insulating covering comprising oxide glass has a thickness of 5 to 20 μm .

8-10. (Canceled)

11. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 2, wherein said insulating covering comprising oxide glass has a thickness of 5 to 20 μm .

12-13. (Canceled)

14. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 2, wherein said insulating covering covers the resistance heating element comprising two or more circuits in a lump.

15-17. (Canceled)

18. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 1, further comprising a thermocouple.

19. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 18, wherein:

said ceramic substrate defines at least one through hole; and

said ceramic heater further comprises a lifter pin inserted through said through hole, said lifter pin being configured to support a semiconductor wafer at a distance above said ceramic substrate.

20. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 18, further comprising at least one bottom hole in a bottom surface of said ceramic substrate.

21. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 1,

wherein said resistance heating element is a metal or a conductive ceramic.

22. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 1,

wherein said resistance heating element is a sintered body produced from metal particles or conductive ceramic particles.

23. (Canceled)

24. (Previously Presented) The ceramic heater to be used in semiconductor industry according to claim 7, wherein said insulating covering covers the resistance heating element comprising two or more circuits in a lump.

25-29. (Canceled)

30. (Previously Presented) The ceramic heater to be used in the semiconductor industry according to claim 1, further comprising:

an insulating layer on the opposite side of said heating surface, wherein said resistance heating element is positioned on said insulating layer.

31. (Currently Amended) A ceramic heater to be used in the semiconductor industry for heating a wafer, comprising:

a disc-form ceramic substrate having a heating surface configured to heat said wafer, and comprising a nitride ceramic or carbide ceramic;

a resistance heating element comprising at least one circuit, said resistance heating element being arranged on an outermost surface of said ceramic substrate; and

an insulating covering deposited on the resistance heating element, wherein said resistance heating element is positioned on an opposite side of said heating surface;

said insulating covering does not inhibit heat flow to said wafer; and

said insulating covering comprises organic resin.

32. (Previously Presented) The ceramic heater of claim 31, wherein said insulating covering is deposited on a stretch containing a portion where said at least one circuit is formed.

33. (Previously Presented) The ceramic heater of claim 31, wherein said insulating covering covers the resistance heating element comprising two or more circuits in a lump.

34. (Previously Presented) The ceramic heater of claim 31, wherein said insulating covering has a thickness of 10 to 30 μm .

35. (Cancelled)

36. (Currently Amended) The ceramic heater of claim 31, wherein said insulating covering ~~comprising~~ comprises polyimide.

37. (Previously Presented) The ceramic heater of claim 31, further comprising:
an insulating layer on the opposite side of said heating surface, wherein said resistance heating element is positioned on said insulating layer.